

NCS-30[®]

NONCONDUCTIVE THREAD COMPOUND

DESCRIPTION

NCS-30[®] nonconductive thread compound is a premium quality, nonmetallic compound containing carbon based fibers and additives and other natural extreme pressure and anti-wear additives. These are blended into **JET-LUBE's** high temp calcium complex base grease. This new base grease offers the additional advantage of superior adhesion to wet steel surfaces, resistance to water wash-off, and most drilling muds. **Especially effective for invert or high-pH muds.**

- Superior resistance to water/moisture
- Excellent performance on high-chrome or nickel alloys
- Contains no metals
- NSF H2 Registered
- Extreme-pressure additives provide additional protection against seizing and galling
- Nonconductive for MWD applications
- Provides maximum protection on **Wedge Thread™*** drill string connection designs
- High frictional properties ideal for casing drilling applications

NCS-30's solids package is formulated to prevent excessive circumferential makeup by increasing the coefficient of friction under compressive forces. As stress levels rise above 50% of yield, the friction factor increases, limiting downhole makeup. Full hydraulic joint efficiency is maintained allowing joint shoulder faces to mate completely without standoff or deformation. **NCS-30**, with frictional properties similar to **KOPR-KOTE[®]**, has been designed to utilize the makeup charts in API RP7G. Premium drill string connections such as HI-TORQUE[®] (HT), eXtreme[®] Torque (XT[®]), and XT-M[™] connections, etc., utilize make-up torques based upon thread compound friction factors of 1.0. Therefore, use the torque provided by the premium connection manufacturer. Adjusting make-up torque based on thread compound friction factor may still be advised.

- For a "Yellow"-rated product, use NCS-30[®] ECF[™].
- Designed for optimum performance on all Rotary-Shouldered connections such as Tool Joints and Drill Collars. It can also be used on premium/proprietary thread designs such as Double-Shouldered, Wedge Thread^{™*}, and other types of mechanical seal designs. It may also be used on certain non-interference tubing thread designs when properly torque compensated.

* Trademark of Hydril Company

PRODUCT CHARACTERISTICS

| | |
|--------------------------------------|--------------------------------|
| Thickener | Calcium Complex Petroleum |
| Fluid Type | Petroleum |
| Dropping Point (ASTM D-2265) | ≥450°F (232°C) |
| Specific Gravity, typical | 1.30 |
| Density (lb/gal), typical | 10.30 |
| Oil Separation (ASTM D-6184) | <3.0 |
| Wt. % Loss @ 212°F (100°C) | |
| Flash Point (ASTM D-92) | >430°F (221°C) |
| NLGI Grade | 1 |
| Penetration @ 77°F (ASTM D-217) | 300 - 330 |
| Copper Strip Corrosion (ASTM D-4048) | 1A, typical |
| Friction Factor* | |
| Relative to API RP 7G | 1.15 (drill strings) |
| Relative to API RP 5A3 | 1.40 (relative to API-Mod) |
| Service Temperature | -20°F (-29°C) to 500°F (260°C) |

Shelf Life: Minimum two years from manufacture date.

* Many factors such as pipe size, thread geometry, drilling mud contamination, etc. affect the friction factor. This is a relative number and in all applications experience and prior knowledge should be used to adjust make-up torque accordingly.

PACKAGING

| Code No. | Container Size | Shipping Wt. |
|----------|----------------|--------------|
| 16923 | 1 gal. | 13 lb. |
| 16913 | 2½ gal. | 30 lb. |
| 16915 | 5 gal. | 56 lb. |
| 16924 | 15 gal. | 175 lb. |
| 16929 | 50 gal. | 589 lb. |

LIMITED WARRANTY

Jet-Lube, Inc. makes the Limited Express Warranty that at the date of delivery, this product shall be free from defects in Jet-Lube, Inc. materials and workmanship.

This Limited Express Warranty is expressly in lieu of any other express or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose, and of any other obligation on the part of Jet-Lube, Inc.

The sole remedy for breach of the Limited Express Warranty shall be the refund of the purchase price. All other liability is negated and disclaimed, and Jet-Lube, Inc. shall not be liable for incidental or consequential damages.

CORPORATE LOCATIONS

Houston, Texas—World Headquarters

Maidenhead, England

Edmonton, Canada



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 www.reinhardoil.dk

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JET-LUBE, INC.

MATERIAL SAFETY DATA SHEET

Product Name: NCS-30®
Chemical Family: Complex grease base
Use: Thread lubricant and sealant, anti-seize compound

Supplier: ReinhardOil.dk ApS
Address: Helleruplund Alle 8
 DK 2900 Hellerup **Phone:** +45 70 26 70 07
Emergency Phone: 21 82 59 60 **Fax:** +45 70 26 70 47

| Hazardous Components | CAS No. | Wt% | OSHA PEL | ACGIH TLV | Other Limits of Exposure |
|----------------------|------------------------------|-------|----------|-----------|--------------------------|
| Lubricating Grease | 74869219 | 45-50 | N/A | N/A | N/A |
| Nonhazardous Blend | 14807966/13463677 7789755 | 40-60 | | | |

Main Hazards—Health Effects

Eyes: May cause irritation. **Inhalation:** Viscous nature may block breathing passages if inhaled. **Ingestion:** May cause diarrhea.
Skin: For hypersensitive persons, may irritate the skin after prolonged periods of contact.

Eyes: Flush with water until all residual material is gone. If irritation persists, seek medical help. **Inhalation:** Clear air passage. If respiratory difficulty continues, seek medical help. **Ingestion:** Wash out mouth immediately. Consult physician. **Skin:** Wash thoroughly with hand cleanser, followed by soap & water. Contaminated clothing should be dry cleaned before reuse.

Extinguishing Media: Foam, dry powder, Halon®, carbon dioxide, sand, earth & water mist. **Unsuitable Extinguishing Media:** Water jet.
Protective Equipment for Fire fighting: Self-contained breathing apparatus.

Personal Precautions: Wear gloves & protective overalls. **Environmental Precautions:** Do not allow it to enter drains. **Spillage:** Scrape up bulk, then wipe up remainder with cloth. To prevent walking hazard, pick up remaining residue with diatomaceous earth.

Handling: No special handling precautions necessary. **Storage:** Do not store at elevated temperatures.

Respiratory Protection: None needed. **Hand Protection:** Protective gloves for hypersensitive persons.
Eye Protection: Glasses, if applied to parts in motion. **Body Protection:** Overalls.

Physical State: Semisolid paste **Color:** Beige **Odor:** Petroleum **pH:** Neutral **Boiling Range/Point °F (°C):** >500 (260)
Melting Point °F (°C): >400 (204) **Flash Point (COC) °F (°C):** >430 (221) **Autoignition Temperature °F (°C):** >500 (260)
Explosive Properties: LEL: 0.9% UEL: 7% **Evaporation Rate (Butyl Acetate):** <0.01 **Partition Coefficient (Log Pow):** N/A
Vapor Pressure (kPa): <0.01 **V.O.C. Content:** Nil **Density (g/cm³):** 1.26 **Flammability:** Not flammable at ambient temperature.
OAR Value: N/A **Oxidizing Properties:** None **Water Solubility:** Nil **Vapor Density:** >5

Stability: Chemically stable under normal conditions. No photoreactive agents. **Conditions to Avoid:** Powerful sources of ignition & extreme temps. **Materials to Avoid:** Strong inorganic & organic acids, oxidizing agents. **Hazardous Decomposition Products:** Burning generates smoke, airborne soot, hydrocarbons & oxides of carbon, sulfur & nitrogen. Residue mainly comprised of soot & mineral oxides.

Acute Toxicity: Not known. **Irritancy—Skin:** Very mild. **Skin Sensitization:** Not known. **Subacute/Sub-chronic Toxicity:** Not known.
Genotoxicity: None known. **Chronic Toxicity:** None known. **California Prop 65:** N/A **Carcinogen:** NTP: No **IARC:** No **OSHA:** No
EC Classification (67/548/EEC): No **Allergens:** None known. **LC-50:** >4000mg/l - extrapolated from component data. **LD-50:** N/A

Possible Effects: None

Behavior: Relatively well behaved. Bioaccumulation potential nil.

Environmental Fate: Highly unlikely to cause widespread contamination. Nontoxic to marine or land organisms.

Product Disposal: Do not incinerate. Contact waste disposal company or local authority for advice.

Container Disposal: Pails without liner—see Product Disposal section above. Pails with plastic liner—pail may only be disposed of via standard waste disposal services, recycled or reused. **Liner—**see Product Disposal section above.

Not classified as hazardous for transport. **D.O.T.:** Nonhazardous **UN No.:** Nonhazardous **Air Transport (ICAO & IATA):** Nonhazardous
Sea Transport (IMO & IMDG): Nonhazardous **Road & Rail Transport (ADR/RID):** Nonhazardous

Labeling Information: None needed **EC Annex 1 Classification:** Not Applicable. **R Phrases:** R22—harmful if swallowed.
S Phrases: N/A, as known. **Ozone Depleting Chemicals:** N/A **TSCA:** All components are listed. **TSCA 12B Components:** None
WHMIS (Canada): Not controlled. **Canadian DSL:** All components listed. **40 CFR Part 372 (SARA Section 313):** N/A
SARA 311/312: None **CERCLA:** Nonhazardous **RCRA Hazard Class:** Nonhazardous

SDS first issued. SDS data revised. **New Jersey Right To Know:** See Section II

LEGEND


- I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY
- II. COMPOSITION INFORMATION ON INGREDIENTS
- III. HAZARDS IDENTIFICATION
- IV. FIRST AID MEASURES
- V. FIRE FIGHTING MEASURES
- VI. ACCIDENTAL RELEASE MEASURES
- VII. HANDLING AND STORAGE
- VIII. EXPOSURE CONTROL/PERSONAL PROTECTION
- IX. PHYSICAL AND CHEMICAL PROPERTIES
- X. STABILITY AND REACTIVITY
- XI. TOXICOLOGICAL INFORMATION
- XII. ECOLOGICAL INFORMATION
- XIII. WASTE DISPOSAL
- XIV. TRANSPORT INFORMATION
- XV. REGULATORY INFORMATION
- XVI. OTHER INFORMATION

HMIS SYMBOL

| | |
|--------------|---|
| HEALTH | 1 |
| FLAMMABILITY | 1 |
| REACTIVITY | 0 |
| PPI | B |

NFPA SYMBOL



Signature: 
Prepared by: Donald A. Oldiges
Date Issued: July 28, 2010

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